



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
SOUTHWEST REGIONAL OFFICE

L. Preston Bryant, Jr.
Secretary of Natural Resources

355 Deadmore Street, P.O. Box 1688, Abingdon, Virginia 24212
(276) 676-4800 Fax (276) 676-4899
www.deq.virginia.gov

David K. Paylor
Director

Dallas R. Sizemore
Regional Director

STATE AIR POLLUTION CONTROL BOARD ENFORCEMENT ACTION - ORDER BY CONSENT

ISSUED TO

APPALACHIAN POWER COMPANY a subsidiary of
AMERICAN ELECTRIC POWER, INC.

FOR
CLINCH RIVER PLANT
Registration No. 10236

SECTION A: Purpose

This is a Consent Agreement and Order issued under the authority of Va. Code §§ 10.1-1309 and 1316, between the State Air Pollution Control Board and Appalachian Power Company, a subsidiary of American Electric Power, Inc., regarding Clinch River Plant, for the purpose of resolving certain violations of the Virginia Air Pollution Control Board Law and Regulations for the Control and Abatement of Air Pollution.

SECTION B: Definitions

Unless the context clearly indicates otherwise, the following words and terms have the meanings assigned to them below:

1. "APCO" means Appalachian Power Company, a subsidiary of American Electric Power, Inc., a corporation authorized to do business in Virginia and its affiliates, partners, subsidiaries, and parents. APCO is a "person" within the meaning of Va. Code § 10.1-1300.

2. "Board" means the State Air Pollution Control Board, a permanent citizens' board of the Commonwealth of Virginia as described in Va. Code §§ 10.1-1301 and 10.1-1184.
3. "Clinch River Plant" means the electric generating plant owned and operated by APCO, located at the junction of state routes 664 and 665 in Carbo, Virginia. Clinch River Plant is a three unit, 705 MW coal-fired electric generating plant.
4. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia as described in Va. Code § 10.1-1183.
5. "Director" means the Director of the Department of Environmental Quality, as described in Va. Code § 10.1-1185.
6. "lb/MMBtu" means pounds per million British Thermal Units.
7. "NAAQS" means the primary national ambient air quality standards established by the U.S. Environmental Protection Agency for certain pollutants, including sulfur dioxide (SO₂), pursuant to § 109 of the federal Clean Air Act, 42 USC § 7409, set forth at 40 C.F.R. Part 50 and incorporated at 9 VAC 5 Chapter 30. NAAQS are established at concentrations necessary to protect public health with an adequate margin of safety.
8. "Notice of Violation" or "NOV" means a type of Notice of Alleged Violation under Va. Code § 10.1-1309.
9. "Order" means this document, also known as a "Consent Order" or "Order by Consent," a type of Special Order under the Virginia Air Pollution Control Law.
10. "Permit" means the State Operating Permit to operate a coal-fired, steam electric generating facility, which was issued under the Virginia Air Pollution Control Law and Regulations to Appalachian Power Company, Clinch River Plant on January 13, 2009.
11. "Regulations" or "Regulations for the Control and Abatement of Air Pollution" means 9 VAC 5 Chapters 10 through 80.
12. "SWRO" means the Southwest Regional Office of DEQ, located in Abingdon, Virginia.
13. "Va. Code" means the Code of Virginia (1950), as amended.
14. "VAC" means the Virginia Administrative Code.

15. "Virginia Air Pollution Control Law" means Chapter 13 (§ 10.1-1300 *et. seq.*) of Title 10.1 of the Va. Code.

SECTION C: Findings of Fact and Conclusions of Law

1. On January 19, 2009, DEQ-SWRO was notified via voice mail by APCO personnel regarding SO₂ emission limit exceedances at the Clinch River Plant.
2. On January 20, 2009, DEQ-SWRO was notified verbally of additional exceedances by APCO personnel.
3. DEQ-SWRO discussed the alleged violations with APCO personnel on January 21, 2009. Additional information regarding the exceedances was requested at that time. Requested information was received at DEQ-SWRO on January 27, 2009.
4. A meeting was held at Clinch River Plant February 3, 2009, with DEQ and APCO personnel to discuss the information received and review what occurred at APCO during the period of January 16, 2009, through January 22, 2009. Additional information requested was received that afternoon.
5. On March 5, 2009, a Notice of Violation was sent to APCO for violation of conditions 3 and 5 of the Permit and condition 8 of the Consent Order executed on August 25, 2008.
 - a. Condition No. 3 of the Permit, states: "Fuel – The sulfur content of the coal feedstock to the B&W Radiant Tube Boilers shall be maintained at levels such that the resulting sulfur dioxide (SO₂) emissions comply with the emission limitations in Conditions 5 and 6 of this permit. A nuclear coal analyzer will be used to obtain real-time data pertaining to the physical properties of the coal feed to the unit bunkers. (9 VAC 5-80-850)"
 - b. Condition No.5 of the Permit states: "Emissions from the operation of each of the three B&W Radiant Tube Boilers shall not exceed the limits specified below:

Sulfur dioxide	2,268.97 lbs/hr (3-hour block average*)
	1.05 lbs/mmBtu per stack (24-hour block average*)
	9,662 tons/year

Compliance with the limitations contained in this condition shall be determined using data and information resultant from and required by Conditions 2-4 and 7 of this permit and any other credible information or data, as approved by the Director, Southwest Regional Office.

The term "3-hour block average" is defined as non-overlapping 3-hour averages, beginning at midnight, as described in 40 CFR Part 50. The term "24-hour block average" is defined as the average of the 24 hourly values from midnight to midnight, as described in 40 CFR Part 50. (9 VAC 5-80-850)"

c. Section D, No. 8, of the June 21, 2008 Clinch River Plant Consent Order, amended August 25, 2008 states: "By January 1, 2009, APCO shall achieve and maintain an actual SO₂ emission rate of 1.08 lb/MMBtu per stack for a 3-hour block average and 1.05 lb/MMBtu per stack for a 24-hour block average. APCO shall install a coal blending system that will enable the coals to be moved by dozer, dozer trap, and conveyors from the storage piles at Clinch River Plant to the truck dump hopper and conveyors which will blend the coals before going to the units. Quality control measurements will be made by a nuclear coal analyzer which will measure the blended coal supply delivered to the unit bunkers.

6. APCO was able to complete installation of the nuclear coal analyzer by January 12, 2009. Thereafter, except for a brief power interruption, throughout the period ending January 22, 2009, the nuclear coal analyzer was in operation and data was being collected to calibrate the analyzer.
7. For the period of January 16, 2009, through January 22, 2009, information provided by APCO continuous emission monitors (CEM's) recorded 22 exceedances of the sulfur dioxide limit of 2,268.97 lbs/hr per unit, for a 3- hour block average, with an exceedance range of up to 25%. Eight (8) exceedances were noted of the 1.05 lbs/MMBtu per stack limit, for a 24-hour block average, with an exceedance range of up to 26%.

Violation of SO₂ emission rate of 1.05lb/MMBtu per stack (24-hour block average).

<u>Stack</u>	<u>Date</u>	<u>lb/mmBTU</u>	<u>% over</u>
1	1/16/09	1.06	1%
2	1/16/09	1.07	2%
1	1/17/09	1.22	16%
2	1/17/09	1.32	26%
1	1/18/09	1.17	11%

2	1/18/09	1.21	15%
1	1/19/09	1.11	6%
2	1/19/09	1.15	10%

Violation of SO₂ emission rate of 2,268.97lbs/hr per unit (3-hour block average).

<u>Stack</u>	<u>Date</u>	<u>lb/hr</u>	<u>% over</u>
1	1/17/09	4,762	5%
1	1/17/09	2,837	25%
1	1/17/09	2,676	18%
1	1/18/09	2,543	12%
1	1/19/09	2,608	15%
1	1/19/09	2,743	21%
1	1/19/09	2,508	11%
1	1/19/09	2,354	4%
1	1/19/09	2,480	9%
1	1/19/09	2,311	2%
2	1/19/09	2,303	1%
2	1/19/09	2,394	6%
2	1/19/09	2,373	5%
2	1/19/09	2,283	1%
1	1/21/09	2,380	5%
1	1/21/09	2,306	2%
1	1/21/09	2,454	8%
1	1/21/09	2,396	6%
1	1/22/09	2,339	3%
1	1/22/09	2,574	13%
1	1/22/09	2,642	16%

8. For the period of January 16, 2009, through January 22, 2009, information provided by APCO, continuous emission monitors (CEM's) recorded 52 exceedances of the sulfur dioxide limit of 1.08 lbs/MMBtu per stack, for a 3-hour block average, as specified in Section D, No. 8 for the period of January 16, 2009, through January 22, 2009. The exceedance range was up to 31%. The 24-hour block average limitation is noted in reference number two (2) above.

Violation of SO₂ emission rate of 1.08lb/MMBtu per stack (3-hour block average).

<u>Stack</u>	<u>Date</u>	<u>lb/mmBTU</u>	<u>% over</u>
1	1/16/09	1.12	4%
2	1/16/09	1.14	6%
2	1/16/09	1.30	20%
1	1/17/09	1.15	6%

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1	1/17/09	1.17	8%
1	1/17/09	1.15	6%
1	1/17/09	1.18	9%
1	1/17/09	1.25	16%
1	1/17/09	1.28	19%
1	1/17/09	1.30	20%
1	1/17/09	1.29	19%
2	1/17/09	1.29	19%
2	1/17/09	1.24	15%
2	1/17/09	1.22	13%
2	1/17/09	1.38	28%
2	1/17/09	1.42	31%
2	1/17/09	1.40	30%
2	1/17/09	1.34	24%
2	1/17/09	1.30	20%
1	1/18/09	1.23	14%
1	1/18/09	1.25	16%
1	1/18/09	1.24	15%
1	1/18/09	1.23	14%
1	1/18/09	1.14	6%
1	1/18/09	1.10	2%
1	1/18/09	1.10	2%
2	1/18/09	1.28	19%
2	1/18/09	1.27	18%
2	1/18/09	1.29	19%
2	1/18/09	1.24	15%
2	1/18/09	1.20	11%
2	1/18/09	1.11	3%
2	1/18/09	1.16	7%
2	1/18/09	1.16	7%
1	1/19/09	1.09	1%
1	1/19/09	1.16	7%
1	1/19/09	1.19	10%
1	1/19/09	1.14	6%
1	1/19/09	1.10	2%
2	1/19/09	1.16	7%
2	1/19/09	1.14	6%
2	1/19/09	1.10	2%
2	1/19/09	1.17	8%
2	1/19/09	1.21	12%
2	1/19/09	1.21	12%
2	1/19/09	1.15	6%
2	1/19/09	1.10	2%
2	1/20/09	1.09	1%

1	1/21/09	1.10	2%
1	1/22/09	1.10	2%
1	1/22/09	1.11	3%
1	1/22/09	1.09	1%

9. In a letter dated February 23, 2009, APCO notified DEQ-SWRO that start-up of the coal blending equipment was February 14, 2009.

10. Throughout the period from January 16 through January 22, 2009, APCO operated four SO₂ ambient air quality monitors near Clinch River Plant to measure compliance with the NAAQS in accordance with the terms of the Consent Order dated August 25, 2008. Data from these monitors was submitted by APCO to DEQ-SWRO on February 3, 2008, and confirmed that at no time during the period from January 16 through January 22, 2009 did concentrations of SO₂ exceed the threshold levels set forth in the Consent Order, and compliance with the 3-hour or 24-hour SO₂ NAAQS was maintained throughout this period.

11. Based on the results of the information submitted by APCO and the follow-up meetings, the Board concludes that APCO has violated Permit condition 5 and condition 8 of the Consent Order issued on June 21, 2008, amended on August 25, 2008, as described in paragraphs C(1) through C(10), above.

SECTION D: Agreement and Order

Accordingly, by virtue of the authority granted it in Va. Code §§ 10.1 – 1309 and 10.1-1316, the Board orders APCO and APCO agrees to:

1. Perform the actions described in Appendix A of this Order; and
2. Pay a civil charge of \$ 77,670 within 30 days of the effective date of this Order in settlement of the violations cited in this Order.

Payment shall be made by check, certified check, money order or cashier's check payable to the "Treasurer of Virginia," delivered to:

Receipts Control
Department of Environmental Quality
Post Office Box 1104
Richmond, Virginia 23218

APCO shall include its Federal ID Number (FEIN) with the civil charge payment and shall indicate that the payment is being made in accordance with the requirements of

this Order for deposit into the Virginia Environmental Emergency Response Fund (VEERF).

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend this Order with the consent of APCO for good cause shown by APCO, or on its own motion pursuant to the Administrative Process Act, Va. Code § 2.2-4000 *et seq.*, after notice and opportunity to be heard.
2. This Order addresses only those issues specifically identified herein. This Order shall not preclude the Board or the Director from taking any action authorized by law, including, but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of APCO as may be authorized by law; and/or (3) taking subsequent action to enforce the terms of this Order. Nothing herein shall affect appropriate enforcement actions by other federal, state or local regulatory authority, whether or not arising out of the same or similar facts.
3. APCO consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.
4. APCO neither admits nor denies the factual findings or conclusions of law contained herein, but solely for purposes of this proceeding, APCO consents to the jurisdiction of DEQ and the Board, declares it has received fair and due process under the Administrative Process Act, Va. Code §§ 2.2-4000 *et seq.*, and the Air Pollution Control Law, and waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board or Director to enforce this Order.
5. Failure by APCO to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
6. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.

7. APCO shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or other such circumstance. APCO must show that such circumstances resulting in noncompliance were beyond its control and not due to a lack of good faith or diligence on its part. APCO shall notify the Director and the DEQ SWRO within 24 hours, and shall submit a follow-up notice in writing within seven days when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of this Order. Such notice shall set forth:
- The reasons for the delay or noncompliance;
 - The projected duration of any such delay or noncompliance;
 - The measures taken and to be taken to prevent or minimize such delay or noncompliance; and
 - the timetable by which such measures will be implemented and the date full compliance will be achieved.

Failure to so notify the Director and the DEQ SWRO, in writing within 24 hours of learning of any condition above, which APCO intends to assert will result in the impossibility of compliance, shall constitute a waiver of any claim of inability to comply with a requirement of this Order.

8. This Order is binding on the parties hereto, their successors in interest, designees, and assigns, jointly and severally.
9. This Order shall become effective upon execution by both the Director of the Department of Environmental Quality or his designee and APCO. Notwithstanding the foregoing, APCO agrees to be bound by any compliance date, which precedes the effective date of this Order.
10. This Order shall continue in effect until:
- APCO petitions the Director or his designee to terminate the Order after it has completed all of the requirements of the Order and the Director or his designee approves the termination of the Order; or
 - the Director or Board terminates the Order in his or its sole discretion upon 30 days' written notice to APCO.

Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve APCO from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

11. By signature below, Appalachian Power Company voluntarily agrees to the issuance of this Order.

AND IT IS ORDERED this 16th day of July 2009.

By:

Dallas R. Sizemore
Dallas R. Sizemore, Director
Department of Environmental Quality
Southwest Regional Office

Appalachian Power Company voluntarily agrees to the issuance of this Order.

Appalachian Power Company by:

John M. McManus
John M. McManus
Designated Representative

The foregoing instrument was signed and acknowledged before me in the County of Franklin, State of Ohio, on this 16 day of July 2009 by John M. McManus, Designated Representative for Appalachian Power Company.

Notary Public

Janet L. White
JANET L. WHITE

Notary Public, State of Ohio
My Commission Expires 09-09-2013

My Commission expires: 9-9-13
Registration Number: 2008-RE-234274

APPENDIX A

1. APCO shall achieve and maintain a SO₂ emission rate of 1.08 lb/MMBtu per stack for a 3-hour block average and 1.05 lb/MMBtu per stack for a 24-hour block average.
2. Within 30 days of the date of this order, APCO shall submit a State Operating Permit Application that requests a SO₂ emission rate of 1.08 lb/MMBtu per stack and a pound per hour emission rate of 4,537.94 lbs/hr for stack 1 and 2,268.97 lb/hr for stack 2. It shall be stipulated in the application that each of the rates above will be computed as a 3-hour block average. APCO shall also request a 24-hour average SO₂ emission rate of 1.05 lb/MMBtu per stack and a pound per day emission rate of 105,886 lbs/day for stack 1 and 52,943 lbs/day for stack 2. It shall be stipulated in the application that each of these daily rates will be computed as a 24-hour block average.
3. APCO shall obtain a sulfur analysis that indicates sulfur content, in weight percent, on each shipment of coal delivered to APCO and maintain records of such analyses on site, available for inspection by DEQ.
4. Beginning with the third quarter of 2009, within 30 days of the end of each calendar quarter, APCO shall submit to the DEQ-SWRO quarterly reports of SO₂ lb/hr and SO₂ lb/MMBtu reported in the following forms for each stack: hourly, 3-hour block average and 24-hour block average information for each day of the quarter. These reports will be submitted for a period of two years after the effective date of this Order.